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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/416,910	10/13/1999	SIMON JOSHUA JACOBS	TI-28505	6758
23494	7590	05/26/2004	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			THEXTON, MATTHEW	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/416,910	<b>Applicant(s)</b> JACOBS, SIMON JOSHUA	
	<b>Examiner</b> Matthew A. Thexton	<b>Art Unit</b> 1714	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,9,11-22,24-40,42-49 and 51-53 is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 10,23,41 and 50 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2004 April 12 has been entered.

### ***Specification***

The disclosure is objected to because of the following informalities:

The last listed commonly assigned document has become a patent; accordingly its patent number should be indicated rather than the application number.

Appropriate correction is required.

### ***Objection to Claims***

Claims 10, 23, 41 and 50 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

These claims recite a polymer type which falls within the genus "polysulfones" but polysulfones have been canceled from each of the independent claims.

***Response to Arguments***

Applicant's arguments, see page 9 of submission filed 2004 April 12, with respect to the rejections of claim(s) 1-53 under 35 USC 103 and under the judicially created doctrine of obviousness-type double patenting have been fully considered and are persuasive. Therefore, the rejections have been withdrawn.

However, upon further consideration, new grounds of rejection are made hereinbelow.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulprathipanja (US 4295994).

The reference discloses adsorbent formulations comprising aluminosilicates such as zeolites (column 7, lines 12+) combined with solvent (example 1) and cellulose acetate butyrate binder where the binder is present at 2.0 to 50.0 weight percent (column 9, lines 12-22). The examples do not specify the proportions used, therefore the proportions suggested are relied upon. It would have been obvious to one of ordinary skill in the art at the time of the invention to have followed the suggestions of the reference to formulate workable adsorbent mixtures which would be encompassed by the proportions of the claims. The ability to reversibly absorb carboxylic acid passivation material (as required in claim 1) is a property that inheres to the formulations which are otherwise obvious.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulprathipanjan et al. (US 4337171).

The reference discloses adsorbent formulations comprising aluminosilicates such as zeolites (column 7, lines 17+) combined with solvent (column 2, lines 52-59, example 1) and cellulose nitrate or cellulose esters such as acetate binder where the aluminosilicate is present at weight ratio relative to the cellulose binder of 1.0 to about 3.0 (column 9, lines 26-45). The additional presence of ion exchange material is not excluded by the presented claims. The examples do not specify the proportions used, therefore the proportions suggested are relied upon. It would have been obvious to one of ordinary skill in the art at the time of the invention to have followed the suggestions of the reference to formulate workable adsorbent mixtures which would be encompassed by the proportions of the claims. The ability to reversibly absorb carboxylic acid passivation material (as required in claim 1) is a property that inheres to the formulations which are otherwise obvious.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulprathipanjan et al. (US 4406819).

The reference discloses adsorbent formulations comprising aluminosilicates such as zeolites (column 7, lines 17+) combined with solvent (column 9, lines 37-55, example 1, claims 5-16) and cellulose ethers such as ethylcellulose binder where the binder is present at 3.0 to 50.0 weight percent (column 9, lines 14-23). The additional presence

of ion exchange material is not excluded by the presented claims. The examples do not specify the proportions used, therefore the proportions suggested are relied upon. It would have been obvious to one of ordinary skill in the art at the time of the invention to have followed the suggestions of the reference to formulate workable adsorbent mixtures which would be encompassed by the proportions of the claims. The ability to reversibly absorb carboxylic acid passivation material (as required in claim 1) is a property that inheres to the formulations which are otherwise obvious.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shores et al. (US 5591379-A).

The reference discloses adsorbent formulations comprising moisture gettering agent such as zeolites (column 2, line 45 to column 3, line 40) combined with solvent (column 4, lines 4-12, example s) and water vapor permeable solid binder such as organic polymers (column 3, lines 52-58), such as cellulose acetate butyrate (example 12) where the moisture getter is present at volume ratio relative to the binder of 0.001 to 2 (column 2, lines 20-21). It would have been obvious to one of ordinary skill in the art at the time of the invention to have followed the suggestions of the reference to formulate workable adsorbent mixtures which would be encompassed by the proportions and materials of the claims. The ability to reversibly absorb carboxylic acid passivation material (as required in claim 1) is a property that inheres to the formulations which are otherwise obvious.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeta et al. (US 5078909-A).

The reference discloses moisture adsorbent formulations comprising moisture gettering agent such as zeolites (column 2, lines 44-52) combined with solid binder such as organic polymers (column 2, line 63 to column 3, line 2), such as polyamide (examples 9, 11, 12) where the moisture getter is present at weight ratio relative to the binder of 5 to 400 (column 2, lines 44-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to have followed the suggestions of the reference to formulate workable adsorbent mixtures which would be encompassed by the proportions and materials of the claims. The ability to reversibly absorb carboxylic acid passivation material (as required in claim 1) is a property that inheres to the formulations which are otherwise obvious.

***Allowable Subject Matter***

Claims 8, 9, 11-22, 24-40, 42-49, and 51-53 are allowed.

***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sugiyama (EP 826822-A2) discloses formulations of cellulose, chitin, hydroxypropylcellulose, et al. (page 3-4, examples) combined with zeolite. Applicant's claims distinguish by requiring higher amounts of 'drying agent' than is disclosed by the reference (see examples).

Doying (US 2933455) discloses formulations of zeolite and binder such as methylcellulose or hydroxyethylcellulose, combined using a liquid vehicle, with binder at 5 to 30 weight percent, and further having carbon adsorbent. This reference is considered cumulative to the references relied upon at this time.

Cook et al. (US 2388390) discloses formulations of desiccant calcium sulphate and cellulose acetate binder, combined using solvent for the binder. This reference is considered cumulative to the references relied upon at this time.


#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 571-272-1125. The examiner can normally be reached on Monday-Friday, 9:30 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Matthew A. Thexton  
Primary Examiner  
Art Unit 1714